**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-28 (cancelled).

29. (currently amended) A method of inserting an artificial implant into a disc space between two adjacent vertebral bodies, the method comprising the steps of:

providing an artificial implant having an upper surface and a lower surface, the upper and lower surfaces being at least arcuate in part in a plane transverse to a mid-longitudinal axis of the implant and adapted to contact an adjacent vertebral body, the implant having a lateral side and an opposite medial side, the implant having generally non-linear leading and trailing ends, said trailing end being configured to generally conform to at least a portion of the natural anatomical curvature of at least one of the anterior, posterior, and lateral aspects of the vertebral bodies, the implant having a length between the leading and trailing ends adapted to allow at least a portion of the leading end and at least a portion of the trailing end to be seated on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies;

forming an opening across a height of the disc space and into a portion of each of the adjacent vertebral bodies, the opening in the portion of each of the adjacent vertebral bodies being at least in part curved;

inserting the implant into the opening with the lateral side facing one of the anterior and lateral aspects of the vertebral bodies; and

positioning the leading end and the trailing end of the implant so that at least a portion of the implant proximate the leading end and at least a portion of the implant proximate the trailing end of the implant between the medial side and the mid-longitudinal axis of the implant ~~is seated on~~overlie the peripheral rim of

the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies and ~~does~~ do not substantially protrude from the spine.

30. (original) The method of claim 29, further comprising the step of attaching a driver instrument to the implant to insert the implant into the opening formed during the step of forming.

31. (original) The method of claim 29, wherein the implant is a fusion implant having a hollow therein, further comprising the step of loading the implant with a fusion promoting material prior to the step of inserting.

32. (original) The method of claim 31, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.

33. (original) The method of claim 29, further comprising the step of combining the implant with a fusion promoting material.

34. (original) The method of claim 33, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.

35. (original) The method of claim 29, wherein the step of forming includes the sub-step of drilling the opening.

36. (original) The method of claim 29, wherein the step of inserting includes linearly inserting the implant into the opening.

37. (original) The method of claim 29, wherein the step of inserting includes rotating the implant into the opening.

38. (original) The method of claim 29, wherein the step of inserting includes screwing the implant into the opening.

39. (currently amended) A method of inserting a pair of artificial implants into a disc space between two adjacent vertebral bodies, the method comprising the steps of:

providing a first artificial implant having a width less than one half the width of the disc space and generally non-linear leading and trailing ends, said

trailing end being configured to generally conform to at least a portion of the natural anatomical curvature of at least one of the anterior, posterior, and lateral aspects of the vertebral bodies, the first implant having a lateral side and an opposite medial side, a mid-longitudinal axis, and a length between the leading and trailing ends adapted to allow at least a portion of the leading end and at least a portion of the trailing end to be seated on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies;

providing a second artificial implant having a width less than one half the width of the disc space and generally non-linear leading and trailing ends being configured to generally conform to at least a portion of the natural anatomical curvature of at least one of the anterior, posterior, and lateral aspects of the vertebral bodies, the second implant having a lateral side and an opposite medial side, a mid-longitudinal axis, and a length between the leading and trailing ends adapted to allow at least a portion of the leading end and at least a portion of the trailing end to be seated on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies;

forming at least one opening across a height of the disc space and into a portion of each of the adjacent vertebral bodies, the at least one opening in the portion of each of the adjacent vertebral bodies being at least in part curved;

inserting the first implant into the at least one opening with the lateral side facing one of the anterior and lateral aspects of the vertebral bodies;

inserting the second implant into the at least one opening with the lateral side facing one of the anterior and lateral aspects of the vertebral bodies; and

positioning the leading end and the trailing end of each implant so that at least a portion of the <u>implant proximate the</u> leading end and at least a portion of the <u>implant proximate the</u> trailing end of each implant between the medial side and the mid-longitudinal axis of the implant ~~is seated on~~<u>overlie</u> the peripheral rim

of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies and ~~does~~ do not substantially protrude from the spine.

40. (original) The method of claim 39, wherein at least one of said providing steps includes providing an implant with an asymmetrical trailing end.

41. (previously presented) The method of claim 29, wherein said providing step includes providing an implant with a symmetrical trailing end.

42. (original) The method of claim 39, wherein each implant is a fusion implant having a hollow therein, further comprising the step of loading each implant with fusion promoting material prior to the steps of inserting.

43. (original) The method of claim 42, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.

44. (original) The method of claim 39, further comprising the step of combining at least one of the implants with a fusion promoting material.

45. (original) The method of claim 44, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.

46. (original) The method of claim 39, wherein the step of forming includes the sub-step of drilling the at least one opening.

47. (original) The method of claim 39, wherein each of the steps of inserting includes linearly inserting the implant into the at least one opening.

48. (original) The method of claim 39, wherein each of the steps of inserting includes rotating the implant into the at least one opening.

49. (original) The method of claim 39, wherein each of the steps of inserting includes screwing the implant into the at least one opening.

50. (previously presented) The method of claim 29, wherein the step of aligning includes aligning a majority of the trailing end of the implant along the apophyseal rim of at least one of the adjacent vertebral bodies.

51. (previously presented) The method of claim 29, wherein the step of providing includes providing the trailing end of the implant with a curved portion generally corresponding to the natural curvature of at least one of the anterior and lateral aspects of the vertebral bodies.

52. (previously presented) The method of claim 39, wherein the step of aligning includes aligning a majority of the trailing end of each implant along the apophyseal rim of at least one of the adjacent vertebral bodies.

53. (previously presented) The method of claim 39, wherein the step of providing includes providing the trailing end of at least one of the implants with a curved portion generally corresponding to the natural curvature of at least one of the anterior and lateral aspects of the vertebral bodies.

54. (previously presented) The method of claim 29, wherein the positioning step includes the sub-step of positioning the entire trailing end of the implant on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies.

55. (previously presented) The method of claim 39, wherein the positioning step includes the sub-step of positioning the entire trailing end of each implant on the peripheral rim of the densely compacted bone along the anatomical curvature of the adjacent vertebral bodies.

56. (previously presented) The method of claim 29, wherein the positioning step includes the sub-step of positioning at least a portion of the trailing end of the implant between the medial side and the mid-longitudinal axis of the implant on at least one of the anterior cortex and apophyseal rim of the adjacent vertebral bodies.

57. (previously presented) The method of claim 39, wherein the positioning step includes the sub-step of positioning at least a portion of the trailing end of each implant between the medial side and the mid-longitudinal axis of the implant on at least one of the anterior cortex and apophyseal rim of the adjacent vertebral bodies.

58. (previously presented) The method of claim 29, wherein the step of providing includes the sub-step of providing the implant with a first maximum length measured along the medial side that is longer than a second maximum length measured along the lateral side.

59. (previously presented) The method of claim 39, wherein the step of providing includes the sub-step of providing the implant with a first maximum length measured along the medial side that is longer than a second maximum length measured along the lateral side.

60. (previously presented) The method of claim 29, wherein the step of positioning includes the sub-steps of placing at least a portion of the trailing end of the implant on a first portion of the peripheral rim and placing at least a portion of the leading end of the implant on a second portion of the peripheral rim opposite said first portion.

61. (previously presented) The method of claim 39, wherein the step of positioning includes the sub-steps of placing at least a portion of the trailing end of the implant on a first portion of the peripheral rim and placing at least a portion of the leading end of the implant on a second portion of the peripheral rim opposite said first portion.